UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte MATT CLARK, SHANE MEYER, CHRIS ROMANZIN, and BRIAN C. ROUNDTREE

Appeal No. 2006-2700
Application No. 10/705,456

ON BRIEF

Before BARRY, SAADAT, and HOMERE, ***Administrative Patent Judges***.

HOMERE, ***Administrative Patent Judge***.

DECISION ON APPEAL

This is a decision on appeal under 35 U.S.C. § 134 from the final rejection of claims 3 through 21, all of which are pending in this application. Claims 18 through 21 have been objected to by the Examiner as being dependent over rejected base claims, but would otherwise be allowable if rewritten in independent form to include the limitations of the base claims and any other intervening claims. Claims 1 and 2 have been canceled by Appellants.

We affirm.

Invention

Appellants' invention relates generally to a programming interface layer for allowing a plurality of vendors (160) to remotely deliver data services to client devices (PDA) (200) through a service provider server (150). The programming interface layer includes a plurality of service functions that any of the vendors may use to deliver their particular data services to clients. The interface further includes a module for processing parameters (e.g. info for a wireless device) associated with specific service functions. Additionally, the interface includes a module for generating responses corresponding to processed parameters previously associated with specific service functions.

Claim 3 is representative of the claimed invention and is reproduced as follows:

3. A computer system comprising:
a processor; and
memory coupled to the processor having a plurality of programming instructions implementing a programming interface layer for a service provider to facilitate delivery of data services to client devices by any of a plurality of vendors via the service provider, the programming interface layer including
a plurality of generic executable service functions callable by any of the plurality of vendors to facilitate delivery of a plurality of heterogeneous data services;
a parameter processing module for processing function-specific parameters, including device information for a wireless mobile device, for one of said plurality of generic executable

service functions wherein said function-specific parameters are associated with one of said generic executable service functions; and

a response generating module for generating a function-specific response from one of said generic executable service functions, wherein said function-specific response is associated with one of said generic executable service functions and includes said device information.

References

The Examiner relies on the following references:

Jones et al. (Jones)	6,216,173	Apr. 10, 2001
Wray	2001/0010076	Jul. 26, 2001
Shapiro et al. (Shapiro)	2002/0120787	Aug. 29, 2002
Fischer et al. (Fischer)	2003/0046448	Mar. 6, 2003 (Filed June 5, 2002)
Wookey et al. (Wookey)	2003/0177259	Sep. 18, 2003 (Filed Feb. 4, 2002)

Rejections at Issue

A. Claims 3, 4, 6 through 8, 10 through 12, and 14 through 17 stand rejected under 35 U.S.C. § 103 as being unpatentable over the combination of Shapiro, Fisher, and Jones.

B. Claims 5, 9, and 13 stand rejected under 35 U.S.C. § 103 as being unpatentable over the combination of Shapiro, Fisher, Jones, Wookey, and Wray.

C. Claims 3 through 21 stand provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-15 of the copending application 2004/013961.

Rather than reiterate the arguments of Appellants and the Examiner, the opinion refers to respective details in the Briefs[1] and the Examiner's Answer.[2] Only those arguments actually made by Appellants have been considered in this decision. Arguments that Appellants could have made but chose not to make in the Briefs have not been taken into consideration. See 37 CFR 41.37(c)(1)(vii)(effective Sept. 13, 2004).

OPINION

In reaching our decision in this appeal, we have carefully considered the subject matter on appeal, the Examiner's rejections, the arguments in support of the rejections and the evidence of obviousness relied upon by the Examiner as support for the rejections. We have, likewise, reviewed and taken into consideration Appellants' arguments set forth in the Briefs along

1 Appellants filed an Appeal Brief on April 3, 2006. Appellants filed a Reply Brief on June 12, 2006.
2 The Examiner mailed an Examiner's Answer on May 4, 2006. The Examiner mailed a communication on June 20, 2006 indicating that the Reply Brief had been entered and considered.

with the Examiner's rationale in support of the rejections and arguments in the rebuttal set forth in the Examiner's Answer. After full consideration of the record before us, we agree with the Examiner that claims 3, 4, 6 through 8, 10 through 12, and 14 through 17 are properly rejected under 35 U.S.C. § 103 as being unpatentable over the combination of Shapiro, Fisher and Jones. We also agree with the Examiner that claims 5, 9, and 13 are properly rejected under 35 U.S.C. § 103 as being unpatentable over the combination of Shapiro, Fisher, Jones, Wookey, and Wray. Additionally, we agree with the Examiner that claims 3 through 21 are properly rejected under the judicially created doctrine of obviousness double patenting as being unpatentable over claim 1-15 of copending application 2004/013961. Accordingly, we affirm the Examiner's rejections of claims 3 through 21 for the reasons set forth **infra**.

I. Under 35 U.S.C. § 103, is the rejection of claims 3, 4, 6 through 8, 10 through 12, and 14 through 17 as being unpatentable over combination of Shapiro, Fisher and Jones proper?

In rejecting claims under 35 U.S.C. § 103, the Examiner bears the initial burden of establishing a prima facie case of obviousness. **In re Oetiker**, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992). **See also In re Piasecki**, 745 F.2d 1468,

1472, 223 USPQ 785, 788 (Fed. Cir. 1984). The Examiner can satisfy this burden by showing that some objective teaching in the prior art or knowledge generally available to one of ordinary skill in the art suggests the claimed subject matter. **In re Fine**, 837 F.2d 1071, 1074, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988). Only if this initial burden is met does the burden of coming forward with evidence or argument shift to the Appellants. **Oetiker**, 977 F.2d at 1445, 24 USPQ2d at 1444. **See also Piasecki**, 745 F.2d at 1472, 223 USPQ at 788. Thus, the examiner must not only assure that the requisite findings are made, based on evidence of record, but must also explain the reasoning by which the findings are deemed to support the examiner's conclusion. However, a suggestion, teaching, or motivation to combine the relevant prior art teachings does not have to be found explicitly in the prior art, as the teaching, motivation, or suggestion may be implicit from the prior art as a whole, rather than expressly stated in the references. The test for an implicit showing is what the combined teachings, knowledge of one of ordinary skill in the art, and the nature of the problem to be solved as a whole would have suggested to those of ordinary skill in the art. **In re Kahn**, 441 F.3d 977, 987-88, 78 USPQ2d 1329, 1336 (Fed. Cir. 2006) citing **In re Kotzab**, 217 F.3d 1365, 1370, 55 USPQ2d 1313,

1316-17 (Fed. Cir. 2000). **See also In re Thrift**, 298 F.3d 1357, 1363, 63 USPQ2d 2002, 2008 (Fed. Cir. 2002).

An obviousness analysis commences with a review and consideration of all the pertinent evidence and arguments. "In reviewing the [E]xaminer's decision on appeal, the Board must necessarily weigh all of the evidence and argument." **Oetiker**, 977 F.2d at 1445, 24 USPQ2d at 1444. "[T]he Board must not only assure that the requisite findings are made, based on evidence of record, but must also explain the reasoning by which the findings are deemed to support the agency's conclusion." **In re Lee**, 277 F.3d 1338, 1344, 61 USPQ2d 1430, 1434 (Fed. Cir. 2002).

With respect to representative claim 3, Appellants argue in the Briefs that neither Shapiro, nor Fisher, nor Jones teaches a programming interface layer that includes the step of processing a plurality of function-specific parameters pertaining to a wireless mobile device to thereby generate a function-specific response to a submitted request. Particularly, at pages 5 and 6 of the Appeal Brief,[3] Appellants state the following:

> None of the cited references, alone or in combination, teaches or suggests 'a parameter processing module for processing function-specific parameters, including device information for a wireless mobile device, for one of said

3 We note that Appellants reiterate these same arguments at pages 4 through 7 of the Reply Brief and at pages 2 and 3 of the Supplemental Reply Brief.

> plurality of generic executable service functions wherein said function-specific parameters are associated with one of said generic executable service functions,' and 'a response generating module for generating a function-specific response from one of said generic executable service functions, wherein said function-specific response is associated with one of said generic executable service functions and includes said device information,' as is claimed in claim 3 of the present invention

In order for us to decide the question of obviousness, "the first inquiry must be into exactly what the claims define." **In re Wilder**, 429 F.2d 447, 450, 166 USPQ 545, 548 (CCPA 1970). "Analysis begins with a key legal question-- *what* is the invention *claimed*?"...Claim interpretation...will normally control the remainder of the decisional process." **Panduit Corp. v. Dennison Mfg.**, 810 F.2d 1561, 1567-68, 1 USPQ2d 1593, 1597 (Fed. Cir. 1987).

We note that representative claim 3 reads in part as follows:

> a plurality of generic executable service functions callable by any of the plurality of vendors to facilitate delivery of a plurality of heterogeneous data services;
>
> a parameter processing module for processing function-specific parameters, including device information for a wireless mobile device, for one of said plurality of generic executable service functions wherein said function-specific parameters are associated with one of said generic executable service functions; and
>
> a response generating module for generating a function-specific response from one of said generic

> executable service functions, wherein said function-specific response is associated with one of said generic executable service functions and includes said device information.

We note at paragraph 53, Appellants' specification states the following:

> [0053] The service provider server 150 (more specifically, framework service 360) is next operative, in block 425, to determine which service to use to respond to the received service request comprising the feature/concepts. Next, in block 430, the service provider server 150 formulates one or more service requests for one or more service vendors, and sends the service request (or requests) to the vendor server (or servers) 160 that were determined in block 425. At each vendor server 160 the service request is responded to in block 435, with the response being directed back to the service provider server 150. In subroutine block 900, the service provider server 150 handles received service results.

Thus, the claim does require processing a plurality of function-specific parameters pertaining to a wireless mobile device to thereby generate a function-specific response to a submitted request.

Now, the question before us is what Shapiro, Fisher and Jones would have taught to one of ordinary skill in the art? To answer this question, we find the following facts:

1. At paragraph 68, Shapiro states the following:

> [M]ultiple web servers may be present to receive requests from client computers and broker the requests to application servers, the web server may itself interface directly with a database, application servers

may interface with various other types of systems, such as specialized authentication servers, e-commerce servers, other types of legacy systems, etc.

2. At paragraph 102, Shapiro states the following:

> [0102] In one embodiment, **the backend system may implement one or more programmatically callable functions, and step 302 may comprise obtaining information specifying these functions**. Examples of programmatically callable functions associated with various types of backend systems include: a specific stored procedure, a prepared query, a BAPI, an RFC, a psft message, an MQseries message, a CICS txn, etc. For example, for an R/3 system, step 302 may comprise **calling an application programming interface (API) provided by the R/3 system to obtain the information specifying the functions. The API may also be employed to determine input and output parameters for the functions.** As another example, for a PeopleSoft system, step 302 may comprise executing database queries to determine programmatically callable functions or stored procedures. [Emphasis added.]

3. At paragraph 103, Shapiro states the following:

> For example, for the R/3 and PeopleSoft examples above, **the received information may directly specify functions available on the backend system, may specify input and/or output parameters associated with the functions,** etc.[Emphasis added].

4. At paragraph 111, Shapiro states the following:

> For example, referring again to the R/3 backend system example discussed above, **a list of programmatically callable functions available on the R/3 system may be returned to the client computer. The client computer may then display this list, and the user may select a subset of the functions that the user wishes to be able to call from the application server. Thus, step 306 may comprise programmatically creating**

> **information corresponding to only the specified subset of functions.** [Emphasis added.]

5. At paragraphs 115 and 116, Shapiro states the following:

> The retrieved information may be used to programmatically construct appropriate data structures and/or execute appropriate code for interfacing with the backend system to access the desired functionality. For example, **the backend system may provide an interface which allows client computers to connect to the backend system and invoke functionality of the backend system, e.g., to call a function, request storage of data, etc**. In one embodiment, the retrieved information may be used to marshal data into a request buffer to send to the backend system. For example, as described above, **where the functionality of the backend system to be invoked comprises a programmatically callable function, the information may specify the function name, function parameters**, etc. Thus, the information may be used in determining data types into which parameter values must be translated, determining the order in which to write the parameters into the request buffer, etc. [Emphasis added.]
>
> [0116] In one embodiment, the application server may support an API which allows programs that execute on the application server to access functionality of backend systems connected to the application server. Thus, steps 330 and 332 may be performed in response to a program calling this API.

With the above discussion in mind, we find that Shapiro discloses an application programming interface (API) that utilizes a plurality of functions callable by multiple web servers (104) and application servers (108) to access a backend system (112). Particularly, Shapiro teaches that the back-end

system, through the API, provides client computers (100) with a list of callable functions available on the back-end system from which the client computers can select functions pertaining to their desired requests. Shapiro further teaches that the selected functions utilize function-specific parameters as a way to broker the client requests to the back-end system via the web servers and the application servers. Additionally, Shapiro teaches that upon receiving a function-specific parameter indicating a particular client request, the back-end system processes the parameter to retrieve the corresponding data or service from the database, the web server, or application server. The back-end system subsequently returns the retrieved data to the client computer through corresponding function-specific parameters associated therewith via the API.

Next, we find that Fisher teaches an API layer for allowing business applications running offline on a mobile communication device to synchronize data with a computer system over an Internet connection. [paragraph 11]

It is our view that one of ordinary skill in the art would have duly recognized that Shapiro's teaching, taken in combination with Fisher's teaching, amount to the claimed limitation of processing function-specific parameters to provide a response to a request for data pertaining to a wireless mobile device. The

ordinarily skilled artisan would have readily been apprised of the fact that by selecting a callable function from the list of available functions in the back-end system, wherein the called functions utilize parameters as a way to transmit a request to the back-end system or a response to the requesting client, the API must necessarily integrate a parameter processing module and a response processing module as recited in representative claim 3. In other words, the ordinarily skilled artisan would have aptly recognized that the recited modules in representative claim 3 are directed to computer codes stored in memory for performing the recited functions. Consequently, the ordinarily skilled artisan would have come to the conclusion that since Shapiro discloses computer codes used in an API for performing the same functions as those of the claimed modules, therefore, Shapiro's program codes must be equivalent to the claimed modules. Additionally, we agree with the Examiner that Fisher complements Shapiro by teaching that the requested data pertains to a wireless device information, which can be synchronized via an API with an online computer system.

As to the Jones reference,[4] the teachings disclosed therein are limited to reconciling data formats between clients and servers to efficiently route the data. It is our view that since the

4 The Examiner relied on Jones for its teaching of encapsulating function calls and associated parameters. However, Appellants amended the claims to delete such limitation.

combination of Shapiro and Fisher teaches the claimed invention, as discussed above, Jones is cumulative to a proper rejection of representative claim 3 under 35 U.S.C. § 103.

In consequence, we do not find error in the Examiner's stated position, which concludes that the combination of Shapiro, Fisher and Jones teaches the claimed limitation of processing a plurality of function-specific parameters pertaining to a wireless mobile device to thereby generate a function-specific response to a submitted request. It is therefore our view, after consideration of the record before us, that the evidence relied upon and the level of skill in the particular art would have suggested to the ordinarily skilled artisan the invention as set forth in claims 3, 4, 6 through 8, 10 through 12, and 14 through 17. Accordingly, we will sustain the Examiner's obviousness rejection of claims 3, 4, 6 through 8, 10 through 12 and 14 through 17.

II. Under 35 U.S.C. § 103, is the rejection of claims 5, 9 and 13 as being unpatentable over the combination of Shapiro, Fisher, Jones, Wookey and Wray proper?

With respect to claims 5, 9, and 13, Appellants argue in the Appeal Brief that the combination of Shapiro, Fisher, Jones does not disclose the claimed limitation of processing a plurality of function-specific parameters pertaining to a wireless mobile device

to thereby generate a function-specific response to a submitted request. We have already addressed this argument in the discussion of representative claim 3 above, and we do not agree with Appellants. Further, Appellants argue that neither Wookey, nor Wray cures the deficiencies of the Shapiro-Fisher-Jones combination. As noted above, we find no such deficiencies in the stated combination for Wookey and Wray to remedy. It is therefore our view, after consideration of the record before us, that the evidence relied upon and the level of skill in the particular art would have suggested to the ordinarily skilled artisan the invention as set forth in claims 5, 9, and 13. Accordingly, the Examiner's obviousness rejection of claims 5, 9, and 13 is sustained.

III. Under the Judicially-Created Doctrine of Obviousness Double Patenting, is the provisional rejection of claims 3 through 21 as being unpatentable claims 1-15 of co-pending Application No. 2004/013961 proper?

With respect to the provisional rejection of claims 3 through 21, Appellants submit at page 1 of the Reply Brief that they will provide a terminal disclaimer to overcome the rejection upon receipt of an indication that the claims are otherwise allowable. Appellants provided no further arguments. Accordingly, we will sustain the Examiner's provisional rejection

of claims 3 through 21 for the reasons stated in the Examiner's Answer.

CONCLUSION

In view of the foregoing discussion, we have sustained the Examiner's decision rejecting claims 3 through 17 under 35 U.S.C. § 103. We have also sustained the Examiner's provisional rejection of claims 3 through 21 under obviousness double patenting. Therefore, we affirm.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a)(1)(iv).

AFFIRMED

LANCE LEONARD BARRY
Administrative Patent Judge)

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